

ABSTRACT OF THE DISCLOSURE

A fuel cell comprises a fuel electrode which has a fuel-diffusion layer for diffusing fuel and a fuel-reactive layer for having the fuel react; an oxygen electrode which has an oxygen-diffusion layer for diffusing oxygen and an oxygen-reactive layer for having the oxygen react; an electrolyte layer which is arranged between the fuel electrode and the oxygen electrode. In this fuel cell, the fuel-reactive layer is in contact with the fuel-diffusion layer, and the oxygen-reactive layer is in contact with the oxygen-diffusion layer. Further, the fuel-diffusion layer has higher water-repellency than that of the oxygen-diffusion layer. According to this fuel cell, cell outputs of fuel cells can be enhanced. Thus, fuel cells and fuel cell devices, which bring high cell outputs, can be provided.